The non-proportion chemical intracellular as of the mayority cause of non-transmissible chronic diseases in humans

René F. Espinosa Álvarez
Specialist of I and II Degree in Comprehensive General Medicine
Master in Infectious Diseases
Auxiliary Researcher
Auxiliary Professor
Higher Institute of Medical Sciences of Havana

José de la Luz Montero García
Doctor in Chemical Sciences
Specialist in Scientific-Technical Information
Institute of Scientific and Technological Information (IDICT)

Summary

A new hypothesis about the true cause of the majority of chronic non-communicable diseases, namely the non-chemical intracellular ratio, is disclosed. Until now, this phenomenon has not been studied due to the lack of availability of equipment capable of leading to a diagnosis inside the cell that allows us to determine its intrinsic processes and the alterations that occur in its chemical composition. In this paper two techniques are proposed, applied in forensic medicine and toxicology, which can open new perspectives for the development of medical sciences.

Keywords: Chronic non-communicable diseases / Causes / Gas chromatography / Mass spectrometer.

Introduction

In an article published in 2008 it was reported that the non-chemical intracellular ratio of sodium and potassium ions predisposes to the formation of tumors[1]. In another study published in 2011, it is stated that excess calcium is the cause of atherosclerosis and primary arterial hypertension[2,3]. Both contributions are a palpable demonstration of what was posed by the Swiss physician and chemist Paracelsus (1493-1541), who had already pronounced since the sixteenth century that diseases had their origin in the insufficiency or lack of any chemical element[4].

Although the Paracelsian criterion suffers from limiting the emergence of evils by default, there is no room to doubt its success at the present time, in which it is recognized that diseases are also produced by the excess of intracellular chemical elements, even when the exact measure or proportion needed to achieve a correct quality of life is ignored.

The level of current knowledge about cell structure is facilitated by the possibilities offered by light and electronic microscopes[5]. The description that can be given of healthy and diseased cells is similar to the description of the elements that make up a work of pictorial art.

Until now there are no teams that can observe in vivo the functioning of the cells without the need to extract and dissect them and extract the intracellular fluid from the diseased ones in order to identify the non-chemical proportion existing inside.

Like all diseases, non-communicable chronicles have their beginning at the cellular level[1]. An important element in this regard is the ability of cells to let molecules (atoms) and ions[6] pass through and to determine which ones can enter and leave it[7]. In the human body there are around 100 trillion cells, which differ greatly from one another, even when they have similar basic structural characteristics and a common chemical composition of intracellular fluids[8].

The positive or negative influence that nutritional habits can have on health or illness states is more than known[9]. To estimate the nutritional requirements in humans, it is enough to observe their behavior regarding the nutrients they ingest, as long as they are individuals who grow up and live normal.[10]

Until now, the importance of maintaining a diet that corresponds to the intracellular chemical composition has not been noticed.

It is argued that most fruits and vegetables are healthy foods. However, it is not the general domain that one and others are products rich in potassium and very poor in sodium. The same goes for most meat products.

The majority of nutritional studies are subjective, because when ingesting food, the measurement of the chemical elements they contain is not taken into account in accordance with the cellular chemical structure and, therefore, they are not reliable or valid.

By means of the hair, all the bad habits of a person can be revealed, thanks to two technologies that emerged in the 1980s, namely, gas chromatography and the mass spectrometer.

The gas phase chromatograph is responsible for isolating each substance one by one, so that later the mass spectrometer can identify and quantify it and require a little more than 250.00 substances. Every substance that is ingested is forever impregnated in the hair. With this, you can have a registry or memory with reliable information for an accurate diagnosis to each individual[11].

Dr. Odon Gordon of the University of Michigan conducted a study in which he found that the hair of men and women of high mental capacity contains much more zinc and copper and less iodine, lead and cadmium than the subjects of both sexes with less capacity, previously subjected to intelligence quotient test[11].

In forensic science, analysts can identify a suspect's hair color from DNA. The drugs and metabolites are trapped in the hair and it can be determined if their consumption has been chronic or acute, in addition to facilitating the search form metals and is useful when it comes to specifying the environmental and occupational exposure of the population to these metals[12]. Abuse drugs have also been detected in hair samples[13].

The aim of the study is to draw attention to the influence that the non-chemical intracellular ratio can have as a triggering factor for chronic non-communicable diseases and the possibilities that the current scientific-technical development offers for the reduction of morbidity and mortality.

Discussion

As far as is known, there are no arguments that allow us to pinpoint the true cause of chronic non-communicable diseases. For example, on the one hand it is suggested that diabetes mellitus is an alteration of insulin secretion that causes hyperglycemia[14], while on the other it is recognized that the disorder, whatever its cause, is linked to insulin deficiency, which can be total, partial or relative[15].

The same occurs with systemic lupus erythematosus (SLE), recognized as a multisystem chronic inflammatory disease of probable autoimmune cause14 and scleroderma as a disease of unknown cause and whose immune mechanisms intervene in its causality[15]. It is also suggested that, although the cause of SLE and scleroderma remain unknown, it is suggested that genetic, hormonal, immune and environmental factors intervene in its[15]

Other diseases could be mentioned and in the end, ask in the XXI century how long do we have to wait to know the true cause of many chronic non-communicable diseases, despite the scientific-technical development achieved?

It is known that every disease occurs within the cell, from which it is clear that it is in it where the cause of any evil has to be sought[1].

In particular, biology has demonstrated convincingly the cellularity and unity of life. The cell is indivisible, it is a quantum, and that if its formal and functional unity is broken, the biological system ceases to be such. Thus the fragmentation of the cell is complete in atomic-molecular species also entire[16].

The structure of the real material systems is diverse, although in any and in any system this is cellular or generalized quantum, as the cells are of the living, as the atoms are of the molecule, etc. The measurements of all the components of any and all systems are congruent, thanks also to the always discreet character of those and their diversity. This constitutes a condition of integration and integrity (Montero García JL, Novoa Blanco JF, Quantum Cellular Structural Geometry (Introduction), Library of Congress (U.S. Copyright Office TX4-000911-633), Havana 1999.

The structure comes from the compaction of material systems in their infinitely long chain of integration. Every material structure more immediately or remotely, is ultimately characterized by a configuration.

In this way, every configuration has to be studied according to its intrinsic compactness, which is what determines the structuring of the material and with it its functionality. That is, a system works if its structure is in correspondence with its measure and in the determined proportion that characterizes it[17].

Every material system is characterized by a certain number of interacting elements. The structure of the system is determined by the elements (fundamental aspect), the interactions and the spatial dispositions of those in their corresponding proportion[17].

In summary, the loss of functions of a system is given by the loss of its structure for its corresponding purpose. In such a way, the true cause of the diseases is in the intra-extracellular structure-function unit.

Nature, as harmonious and perfect, has its universal laws, so you can not go against them. According to one of these universal laws, for something to exist it must have mass, be integrated with a structure with a chemical composition and keep a certain proportion with its corresponding purpose with one or several functions. When a function is affected, it is the product of a structural damage, from which it is inferred that in order for the first to take place, the second must be produced[17].

Although it has been said that from the second half of the twentieth century the great scientific-technical revolution was more evident in the field of biology, there is no doubt that the common fusion of these with other branches from genetics to the molecular structure together with the numerous discoveries that have taken place, it reflects the certainty of conceiving a general convergence of all sciences[18].

The development of biology made possible the achievement of later substantial advances, coinciding with other new contributions, of chemistry and physics. The application of their knowledge to explain the mechanical and electrical characteristics and the chemistry of living organisms further highlighted their biological aspects[19].

The integration of chemistry and physics into biology not only led to the establishment of biochemistry and biophysics as sciences, since, in addition to that, it exerted a profound influence on the remaining approaches of biology, especially giving it a new character and increasing the importance of the experimentation activity[20].

In this way, the biopsychosocial thinking of physicians will not be able to specify the true causes of multiple diseases nor to pretend that the metabolites extracted from plants (active principle) can restore the internal structures of the affected cells and recover their functions, If you do not have a marked domain of biochemistry and biophysics to reach the interior of the cell and be able to interpret and explain the phenomena that occur within it.

Most medications that are produced to control chronic non-communicable diseases supply functions but do not fix structures.

In medical practice, it is vital to inquire about the foods that patients eat; the way in which it prepares them and the amount they consume, because it is important to know the chemical elements that compose them, which must correspond to the intracellular chemical composition.

Gas chromatography and the mass spectrometer could have application, given their characteristics, in the study of chronic non-communicable diseases, by providing the possibility of determining the intracellular chemical non-proportion of diseased cells. For example, to be able to specify the composition of hair cells, can indirectly help the achievement of this purpose. Therefore it is proposed the opening of new research routes to pinpoint the true cause of these diseases through the measurement of intracellular chemical elements such as sodium, potassium, calcium, magnesium, chlorine, bicarbonate, phosphate and the sulfate.

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